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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/707,228	11/28/2003	Gregory K. Otten	22.3089	1227
26932	7590	01/09/2006	EXAMINER	
JEFFREY E. DALY GRANT PRIDECO, L.P. 400 N. SAM HOUSTON PARKWAY EAST SUITE 900 HOUSTON, TX 77060			HEWITT, JAMES M	
			ART UNIT	PAPER NUMBER
			3679	

DATE MAILED: 01/09/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>		<b>Applicant(s)</b>	
	10/707,228		OTTEN, GREGORY K.	
	<b>Examiner</b>		<b>Art Unit</b>	
	James M. Hewitt		3679	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 29 September 2005.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-6,9-36,38-72 and 74-81 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6, 9-36, 38-72 and 74-81 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

## **DETAILED ACTION**

### ***Claim Objections***

Claims 64-72 and 74-81 are objected to because of the following informalities:

In claim 64 line 8, the phrase "said threaded connector" should be replaced with "said coupled one of said threaded connectors" for clarity.

In claim 65 lines 3-4, "coupled" should be inserted between "said" and "connector".

Appropriate correction is required.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1, 9-10 and 13-18 are rejected under 35 U.S.C. 102(e) as being anticipated by Hosoya et al (US 2004/0195836).

With particular reference to Figure 1, Hosoya et al disclose a first section of pipe (2) having a threaded pin connector that is threadedly connected to a

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second section of pipe (3) having a threaded box connector. External to the threaded joint is a circumferential recess (8) that is formed by the end of the box connector and a shoulder of the pin connector, and which has disposed therein a welding material (9). Internal to the threaded joint is another circumferential recess (6) that is formed by the end of the pin connector and a shoulder of the box connector. As is evidenced in Figure 1, the end of the pin connector includes an external surface which is in sealing engagement (via an interference fit) with an internal surface of the box connector adjacent the shoulder of the box. At the least, the weld (9) creates or establishes an interference fit between an external surface of the pin and an internal surface of the box at a location adjacent the weld (9).

Regarding claims 16-17, the method of forming the device is not germane to the issue of patentability of the device itself. Therefore, the limitations set forth in claims 16 and 17 have not been given patentable weight.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 11 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hosoya et al (US 2004/0195836).

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Regarding claims 11, Hosoya et al discloses all the limitations set forth in this claim except for the claimed range for the relative depth of the weld joint. It would have been obvious to one having ordinary skill in the art at the time the invention was made to employ the claimed range for the depth of the weld joint relative to the thickness of a pipe section, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art.

Regarding claims 12, it is unclear whether Hosoya et al's weld joint is a J-groove weld joint. However, given that J-groove weld joint are known and commonly employed, it would have been obvious to one having ordinary skill in the art at the time the invention was made to employ a J-groove weld joint in Hosoya et al.

Claims 1-6, 9-36, 38-66, 70-72 and 74-81 are rejected under 35 U.S.C. 103(a) as being unpatentable over Blose (US 4,192,533) in view of Klanke (US 3,677,580).

With particular reference to Figure 3, Blose discloses a first section of pipe (220) having a threaded pin connector (211) welded thereto that is threadedly connected to a second section of pipe (221) having a threaded box connector (212) welded thereto. The end of the pin connector includes an external surface which is in sealing engagement (via an interference fit) with an internal surface of the box connector adjacent the shoulder of the box. The end of the box connector and a shoulder of the box connector form a pair of frusto-conical,

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parallel shoulders (237, 238) that assist in holding the pin and box members against radial and axial separation. Klanke discloses a similar pipe coupling wherein a weld (W) is formed between the end of beveled pin and box members to provide a rigid and secure pipeline construction. In view of Klanke's teaching, it would have been obvious to one having ordinary skill in the art at the time the invention was made to form and secure beveled shoulders of the pin and box members in Blose with a weld in order to provide a rigid and secure pipeline construction that prevents radial and axial separation.

It is not explicit whether butt-welding is used to weld the pin and box connectors of Blose to the respective first and second sections of pipe, but as butt-welding is known and commonly used for such, it would have been obvious to one having ordinary skill in the art at the time the invention was made to butt-weld the pin and box connectors of Blose to the respective first and second sections of pipe.

With respect to claims 4, 20, 39, 53 and 74, it would have been obvious to one having ordinary skill in the art to modify Blose with wedged dovetail threads with a continuously varying flank-to-flank width as an alternative thread type and/or in order to meet given design requirements for the given application.

With respect to claims 11, 26, 44, 58 and 81, Klanke discloses all the limitations set forth in these claims except for the claimed range for the relative depth of the weld joint. It would have been obvious to one having ordinary skill in the art at the time the invention was made to employ the claimed range for the depth of the weld joint relative to the thickness of a pipe section, since it has

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been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art.

With respect to claims 12, 27, 45, 59 and 77, it is unclear whether Klanke's weld joint is a J-groove weld joint. However, given that J-groove weld joint are known and commonly employed, it would have been obvious to one having ordinary skill in the art at the time the invention was made to employ a J-groove weld joint.

With respect to claims 16-17, 31-32, 47-48 and 61-62, the method of forming the device is not germane to the issue of patentability of the device itself. Therefore, the limitations set forth in claims 47 and 48 have not been given patentable weight.

Regarding claim 34, it should be understood that in Blose the opposite end of pipe section (220) may have a box connector like the box connector on pipe section (221), and likewise the opposite end of pipe section (221) may have a pin connector like the pin connector on pipe section (220).

Regarding claim 64, note that Blose's device is considered to be part of a pipeline comprised of sections of pipe having threaded connectors on each end as is known and should be understood.

Regarding claims 70 and 79, the weld joint can be filled in a single weld pass.



Regarding claims 71 and 72, it should be understood that Blose's pipe sections (220, 221) are part of a pipeline and may have box or pin connectors on each end.

Claims 67-69 are rejected under 35 U.S.C. 103(a) as being unpatentable over Blose (US 4,192,533) in view of Klanke (US 3,677,580) as applied to claim 64, and further in view of Applicant's Admitted Prior Art.

With respect to claim 67, in paragraph [0005], Applicant discloses that the "J-lay" technique is known. And as Blose's device is considered applicable to subsea pipeline, it would have been obvious to one having ordinary skill in the art to employ such a technique to form Blose's pipeline in order to allow laying of the pipeline in deep water without stressing the pipeline material excessively.

With respect to claims 68-69, in paragraph [0036], Applicant discloses that employing a top drive and power tong to rotate and couple a pipe section to a pipeline is known, it would have been obvious to one having ordinary skill in the art to employ a top drive and power tong to rotate and couple a pipe section to a pipeline in order to efficiently and reliably connect sections of pipe.

### ***Response to Arguments***

Applicant's arguments filed 9/29/05 with respect to Hosoya et al not disclosing the claimed sealing interface to have an interference fit have been fully considered but they are not persuasive. As is evidenced in Figure 1, the end of the pin connector includes an external surface which is in sealing engagement



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(via an interference fit) with an internal surface of the box connector adjacent the shoulder of the box. At the least, the weld (9) creates or establishes an interference fit between an external surface of the pin and an internal surface of the box at a location adjacent the weld (9).

Applicant's arguments with respect to the combination of Hosoya et al and Huntsinger have been fully considered and are persuasive. Therefore, these rejections have been withdrawn. However, upon further consideration, a new ground(s) of rejection is made (see above).

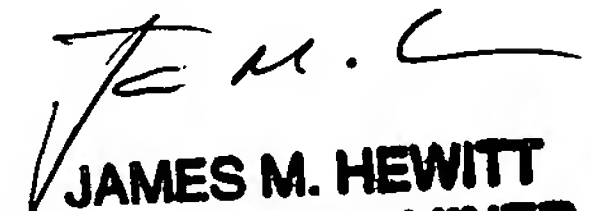
### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to James M. Hewitt whose telephone number is 571-272-7084.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel Stodola can be reached on 571-272-7087. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
**JAMES M. HEWITT**  
**PRIMARY EXAMINER**